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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,369	07/17/2003	Ludovic Fleury	Q76520	9715
23373	7590	09/29/2005		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER WONG, TINA MEI SENG	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/620,369	Applicant(s) FLEURY ET AL.	
	Examiner Tina M. Wong	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is responsive to applicant's communication submitted on 11 August 2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,456,773 to Keys in view of U.S. Patent 5,673,354 to Akasaka et al. Keys discloses a module including a structure (300) with a plurality of submodules (325, 350) which are in series and separable from the structure. Furthermore, Keys discloses the submodules to be interconnected by more than one connection and each submodule includes a support/spool to which at least one compensation fiber (416, 418) is fixed. (Figures 3 and 4)

Keys fails to specifically disclose the interconnected connections to be identifiable to the naked eye without optical measurements. However, it can be observed the boot connectors (427, 435) and adapters (410, 412) are placed on the exterior of the housing. Since the connections can be seen on the exterior of the structure and one of ordinary skill in the art would recognize the boot connectors and adapters as interconnecting pieces and furthermore, it would be advantageous for the connection pieces to be identifiable for ease and convenience, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to be able to identify the interconnected connections.

Keys also fails to disclose different compensation fiber to be used in the submodules. However, Keys discloses any type of compensation fiber can be coupled to the communication system. Furthermore, Keys discloses the appropriate fiber should be used in order to gain the result intended. (Column 4) Keys' disclosure is more particularly drawn to the module itself than the optical fibers. Since Applicant does not specifically state or disclose an advantage to using the different fibers and Applicant further discloses the use of the same compensating fibers, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have different kinds of compensating fibers in the submodules since Keys teaches the use of the appropriate fiber and Applicant fails to specifically disclose the use of different fibers to solve a stated problem or is for a particular purpose.

Keys further fails to disclose the dispersion compensation ratio to be between 0.9 to 1.1. However, Akasaka et al discloses the perfect dispersion compensation ratio of a wavelength from 1530 nm to 1570 nm (spectral band C) to be between 0.75 and 1.25. Since the ratio disclosed by Akasaka et al is a known range and Keys is silent on the dispersion ratio, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have a dispersion compensation ration between 0.9 and 1.1.

Claims 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,456,773 to Keys.

Keys discloses a main fiber line (425), a compensation module with at last two submodules connected in series, each with a dispersion compensation fiber, transmitting information over the main fiber line, and the ability to replace the second module with a third module, where the second and third submodules are removable from the module and

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exchangeable with each other. But Keys fails to specifically disclose the dispersion compensation fibers to be compensating for chromatic dispersion.

However, Keys does disclose that depending on the length of the dispersion compensated fiber; the amount of chromatic dispersion is affected. Since Applicant discloses a first length, a second length and a third length and Keys discloses many different lengths or spans can be used, the dispersion compensated fibers do compensate chromatic dispersion.

Keys further fails to specifically disclose one or more connections identifiable to the naked eye without optical measurements. However, it can be observed the boot connectors and adapters are placed on the exterior of the housing. Since the connections can be seen on the exterior of the structure and one of ordinary skill in the art would recognize the boot connectors and adapters as interconnecting pieces and furthermore, it would be advantageous for the connection pieces to be identifiable for ease and convenience, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to be able to identify the interconnected connections.

Response to Arguments

Applicant's arguments filed 11 August 2005 have been fully considered but they are not persuasive.

Applicant argues Keys is silent with respect to modules having submodules to provide chromatic dispersion in an optical fiber line over multiple bands. However, the Examiner disagrees. Applicant states that Keys addresses the use of optical fiber with different lengths. Keys further states that the amount of chromatic dispersion that is compensated depends on the length of the optical fiber. Keys further discloses a variety of different lengths of optical fibers

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can be placed in the different spools of the submodules. Therefore, Keys does disclose the submodules to provide chromatic dispersions operating over different bands, depending on the length of the optical fibers.

Applicant also argues Keys does not address the device to be easily modified to operate in different bands. However, Keys discloses a variety of optical fibers to be used. Keys further does not limit the type of fibers. Furthermore, it is desirable for the submodules to be able to be upgraded or exchanged in order to reduce cost. Keys does disclose the different submodules and spools that can be removed and exchanged from the module in order to obtain the desired chromatic dispersion.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

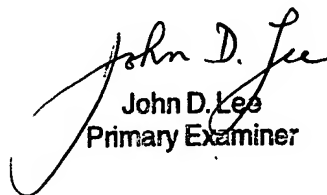
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M. Wong whose telephone number is (571) 272-2352. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TMW


John D. Lee
Primary Examiner